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## I CLAIM:

1           1.    A drill chuck comprising:  
2           a chuck body extending along and rotatable about an  
3   axis and formed with an axially forwardly open tool seat and with  
4   a plurality of angled guides opening axially forward into the  
5   seat;  
6           respective jaws in the guides having toothed outer  
7   edges;  
8           an inner sleeve having a screwthread threadedly  
9   engaging the jaw outer edges, axially shiftable on the body, and  
10   rotatable about the axis to axially displace the jaws; and  
11           mechanism engaged between the inner sleeve and the  
12   chuck body for axially displacing the inner sleeve relative to  
13   the body and thereby axially displacing the jaws.

1           2.   The drill chuck defined in claim 1, further  
2   comprising  
3           an outer sleeve surrounding the inner sleeve, the  
4   mechanism being actuated by the outer sleeve; and  
5           a limited-slip coupling between the inner sleeve and  
6   the outer sleeve.

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1                   3. The drill chuck defined in claim 2 wherein the  
2 mechanism includes another screwthread between the outer sleeve  
3 and the chuck body.

1                   4. The drill chuck defined in claim 3 wherein the  
2 inner-sleeve screwthread is of steeper pitch than the outer-  
3 sleeve screwthread.

1                   5. The drill chuck defined in claim 4 wherein the  
2 outer sleeve is provided with a ring formed with the outer-sleeve  
3 screwthread, rotationally coupled to the outer sleeve, and  
4 bearing axially forward on the inner sleeve.

1                   6. The drill chuck defined in claim 5, further  
2 comprising  
3 a roller bearing between the outer-sleeve ring and a  
4 rear end of the inner sleeve.

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1                   7. The drill chuck defined in claim 4, further  
2 comprising  
3                   angularly engageable inner and outer abutments on th  
4 inner and outer sleeves limiting relative rotation to less than  
5 360°.

1                   8. The drill chuck defined in claim 4 wherein the  
2 outer-sleeve ring has an axially elongated inner collar formed  
3 with the outer-sleeve screwthread.

1                   9. The drill chuck defined in claim 4 wherein the  
2 outer-sleeve ring is formed with axially throughgoing chip-  
3 passing holes.

1                   10. The drill chuck defined in claim 4 wherein each of  
2 the sleeves has a substantially cylindrical rear-end portion, a  
3 substantially cylindrical front-end portion of smaller diameter  
4 than the respective rear-end portion, and a substantially  
5 frustoconical intermediate portion joining the respective front-  
6 end and rear-end portions, the intermediate portions being  
7 axially level with each other and fitting complementarily within  
8 each other.

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1           11. The drill chuck defined in claim 4, further  
2 comprising  
3           a spring element coupled angularly to one of the  
4 sleeves and couplable angularly to the other of the sleeves.

1           12. The drill chuck defined in claim 11 wherein th  
2 other sleeve is formed with a radially open pocket and the spring  
3 element is formed with a radially projecting bump engageable in  
4 the pocket.

1           13. The drill chuck defined in claim 12 wherein the  
2 chuck body is formed with an annular row of radially projecting  
3 teeth, the spring element having a tip engageable in the teeth  
4 when the bump is disengaged from the pocket.

1           14. The drill chuck defined in claim 13 wherein the  
2 outer sleeve is made of metal and is provided with a plastic cam  
3 ring forming the pocket.

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1           15. The drill chuck defined in claim 13 wherein the  
2       teeth have an axial length substantially longer than an angular  
3       length of the spring-element tip, whereby the spring-element tip  
4       can move axially while remaining engaged with the teeth.

1           16. The drill chuck defined in claim 13 wherein the  
2       chuck-body teeth are sawteeth so that the tip can slide in on  
3       angular direction on them and is blocked against sliding in the  
4       opposite direction on them.

1           17. The drill chuck defined in claim 4, further  
2       comprising  
3               a shield cap engaged over a front end of the outer  
4       sleeve and rotatable about the axis.

1           18. The drill chuck defined in claim 17 wherein the  
2       cap is rotatably mounted on the outer sleeve.

1           19. The drill chuck defined in claim 17 wherein the  
2       cap is rotatably mounted on the chuck body.

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1                   20. The drill chuck defined in claim 4, further  
2 comprising  
3                   a ring formed with axially forwardly open pockets  
4 aligned with the guides and engaged between the mechanism and a  
5 rear end of the inner sleeve.